

# Northern Mining News

Volume 12, No. 10

October 2018



## In this October 2018 issue:

Baffinland gets approval to raise production to six million tonnes.....	2
TMAC makes important permitting advance for Madrid-Boston.....	4
NWT third in global diamond production volume and value .....	5
Mountain Province announces Q3 production results.....	6
Prairie Creek all season road gets federal approval .....	7
Tlichon all season road gets EA approvals .....	8
Agnico Eagle reports third quarter results.....	9
Sabina Gold & Silver expands Nuvuyak discovery at Back River Gold.....	10
Chamber supports METC renewal, extension, and northern enhancement.....	11
Avalon provides progress report on Nechalacho .....	12
Geophysical map data added to western NWT .....	14
NWT diamond mines donate \$45,000 to support Rockhill apartment fire victims.....	14
Exploration & development news briefs .....	15
Calendar of events .....	17
Welcome new members!.....	18
Member news releases this past month .....	19
Some members' corporate presentations.....	19
Geoscience Forum approaching! .....	20
MAX Awards tickets available.....	21
What's happening around town ... ..	22
Mines & promising Northwest Territories mine projects.....	23
Mines & promising Nunavut mine projects.....	26
Project maps .....	28

## From the Executive Director ...

Welcome to our October newsletter. We've seen some positive announcements across our industry this past month. Reason for optimism for the future! For example, Baffinland, which needs to raise iron ore production will be doing so in 2019 and then looks to target increased production at 12 million tonnes per year. At TMAC, their Boston-Madrid project at Hope Bay now has federal approval and the next steps include project certificate and water licensing. Meliadine and Amaruq are proceeding better than planned.

On the NWT side, gratifying to see diamond producers continuing to drive Canada's ranking as the world's third largest producer. Quality product produced to the highest standards! Some encouraging advances on infrastructure, specifically approvals related to the Tlichon and Prairie Creek all season roads; essential to support the NICO and the Prairie Creek mines respectively. All these developments mean jobs, business spending, and tax revenues for governments.

As we move into November, that means it's Geoscience Forum season and time for the MAX awards too! I look forward to seeing everyone at these events which highlight our minerals industry, our support businesses, our geoscience researchers, and our people.

Happy reading! ... Editor

***Our Mission:*** To provide leadership on, and advocate for, responsible and sustainable mineral exploration and development in the NWT and Nunavut.

## **Baffinland gets approval to raise production to six million tonnes**

In early October, Baffinland reported approval to increase 2019 Mary River Mine production to six million tonnes from 4.2 million tonnes. As part of its overall expansion plans, Baffinland is also seeking approval to subsequently raise production to 12 million tonnes per year.

The Minister of Intergovernmental and Northern Affairs and Internal Trade and the Minister of Crown-Indigenous Relations approved the six million tonne positive variance of the Nunavut Impact Review Board's (NIRB) review.

"I first would like to thank the Nunavut Impact Review Board for their original report on our application to expand our operation and further develop the Milne Inlet Port," said Brian Penney, President and CEO.

"The findings in their report identified key improvement areas within our application that we have since addressed and provided an opportunity for Baffinland to continue to build stronger relationships with our partners, including the Qikiqtani Inuit Association, the Government of Nunavut, the North Baffin communities, and all Nunavummiut," he added.

The positive variance decision by the Ministry was, in part, based on the strong relationships between the North Baffin communities, the Qikiqtani Inuit Association, and Baffinland, and the importance of the mine for Nunavut and all of Canada. Employing approximately 2,000 employees and contractors, Baffinland is the largest private employer in the Baffin region.



*In June 2018, iron ore at Baffinland's Mary River Mine is stockpiled awaiting shipment. Photo courtesy Baffinland*

Baffinland’s application to the NIRB also included the construction of a 15 million litre fuel tank and a 380-person camp and associated infrastructure developments at Milne Inlet. The Ministers’ decision accepted the positive recommendation of the NIRB to proceed with these application components.

Baffinland will continue to develop and operate the Mary River Mine in a safe and sustainable manner and reconfirms its 2018 guidance. The company is committed to working closely with its project partners, regulatory bodies, and the North Baffin communities to ensure the realization of benefits from the Mary River project. [View release.](#)

### ***Successful Phase 2 conformity decision from NIRB***

On October 12, the company [announced](#) receipt of successful conformity determination from NIRB for its Final Environmental Impact Statement addendum for this Phase 2 expansion. The addendum is available on the [NIRB Public Registry](#) and the Popular Summary of the application for Phase 2 is posted [here](#). This is a critical step in the development of the Mary River Mine, as Baffinland looks to adopt a stepped-approach to expand the mine. The Phase 2 expansion focuses on the construction and operation of a 110-km railway from the Mary River Mine to Milne Port, and expanding production from six million tonnes per year to 12 million tonnes per year.

### ***Coordinated NIRB-NWB review process***

The NIRB’s acceptance of the FEIS addendum has initiated the public technical review phase, which will include a set of technical meetings in Iqaluit March 12-15, 2019. These meetings will be jointly held with the Nunavut Water Board (NWB) as part of a partially coordinated review process to amend the Type A Water Licence. Following the technical review, a final review period will take place and conclude with a set of separate Public Hearings by the NIRB and NWB, and subsequent reports being issued to the Minister. [Click here](#) to learn more about the coordinated review process.

### ***Community engagement***

Over the next few months Baffinland and other regulators will be holding community information sessions in affected communities, providing opportunities for residents to ask important questions about the Phase 2 project and provide their input for consideration.

Baffinland also has more involved engagement activities planned to discuss priority topics with a view to enhancing proposed monitoring and management plans. Baffinland is planning to host its first community tour specific to the Phase 2 review process between November 5-9, 2018 in all five North Baffin communities.

<b>Date</b>	<b>Location</b>	<b>Time</b>	<b>Venue</b>
Hall Beach	November 5, 2018	6:30 – 10:00	Community Hall
Igloolik	November 6, 2018	6:30 – 10:00	Community Hall
Arctic Bay	November 7, 2018	6:30 – 10:00	Community Hall
Pond Inlet	November 8, 2018	6:30 – 10:00	Nasivvik High School
Clyde River	November 9, 2018	6:30 – 10:00	Community Hall

## TMAC makes important permitting advance for Madrid-Boston

TMAC Resources Inc. has received federal approval for its Madrid-Boston gold project which clears the way for the development's project certificate.

Caroline Bennett, Minister of Crown Indigenous Relations and Dominic LeBlanc, Minister of Intergovernmental and Northern Affairs and Internal Trade, have accepted the positive recommendation of the Nunavut Impact Review Board (NIRB), allowing the NIRB to finalize and issue a project certificate.

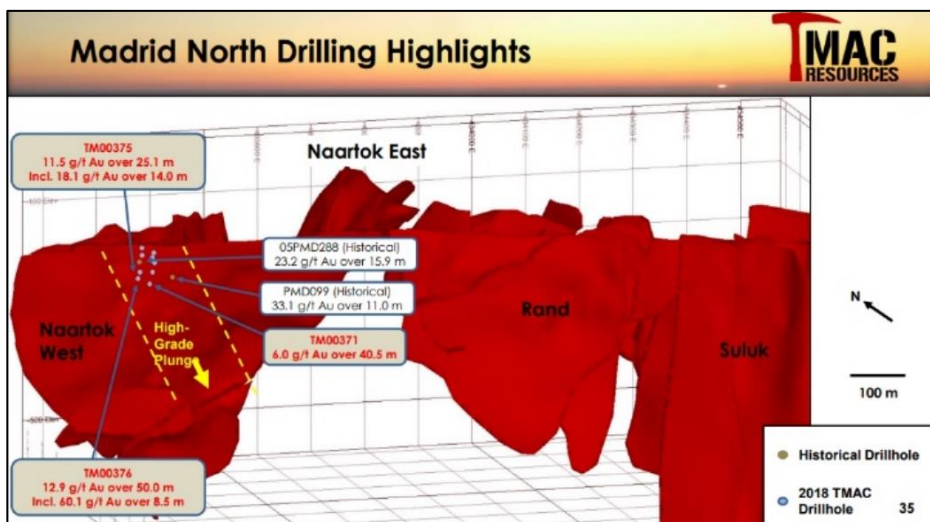
TMAC attended the Nunavut Water Board (NWB) final hearing held in Cambridge Bay in October. This hearing focused on the water use, infrastructure and tailings deposition requirements to be included in the amended Doris Type A Water Licence and a new Type A Water Licence for construction and operations at the Madrid and Boston mines.

TMAC expects that the NIRB will issue a new project certificate before the end of the year and that the amended and new Type A Water Licences will be received from the NWB in the spring of 2019.

The Madrid-Boston Project, as defined for permitting, includes the construction of all required surface infrastructure for the three additional currently identified gold deposits at Hope Bay: Madrid North, Madrid South, and Boston. The capacity of the currently permitted tailings

impoundment area at the Doris site will increase from 2.5 million tonnes to 18 million tonnes. At Boston, a new tailings management area will be permitted with a capacity of 5.1 million tonnes.

"TMAC thanks the Kitikmeot Inuit Association, the communities of the Kitikmeot region, community Elders and all government agencies for their significant contributions to the review and their continued trust and support of TMAC in responsibly developing Hope Bay. This acceptance from the Honourable Carolyn Bennett, Minister of Crown Indigenous Relations and the Honourable Dominic LeBlanc, Minister of Intergovernmental and Northern Affairs and Internal Trade reflects the many years of extensive Inuit and government consultation and community support for the project," said Jason Neal, President and Chief Executive Officer of TMAC. [View release](#)



## NWT third in global diamond production volume and value

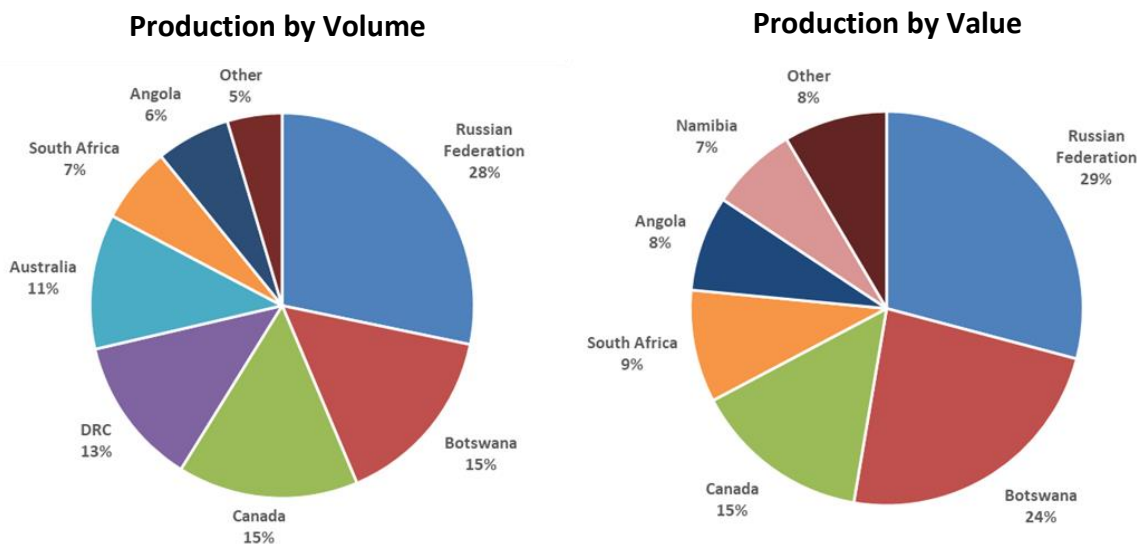
By both volume and value of carats produced, the Northwest Territories is the world’s third largest rough diamond producer, according to 2017 statistics released by the Kimberley Process. The Kimberley Process, a joint governments, industry, and civil society initiative to stem the flow of conflict diamonds, was initiated in 2000 and unites 81 countries, including Canada.

The NWT, with its Ekati, Diavik, and Gahcho Kué diamond mines, produced nearly 21 million carats last year. This represents 90 per cent of Canada’s rough diamond production. Ontario (Victor mine) and Quebec (Renard mine) together produced 2.4 million carats last year. Overall, Canada is second in the world in carats produced, up from fifth in 2016, and third by value (unchanged from 2016).

Global diamond production of 151 million carats was up 19 per cent from 2016. Value, at US\$14.1 billion, was up 15 per cent over the previous year. For detailed 2017 production and value statistics for all diamond producing countries, visit the Kimberley Process web site here.

“The NWT is among the leaders in diamond production. Our product is mined to the highest business and environmental standards by world-class companies working in partnership with local businesses, and with our public and Indigenous governments,” said NWT & Nunavut Chamber of Mines President Gary Vivian. “After a decline in 2016, due to no production from closure of the Snap Lake diamond mine, production gained ground in 2017 with the addition of Gahcho Kué,” he added.

View the [chamber release](#), which includes a link to the Kimberley Process 2017 global volume and value production statistics for all diamond producing countries.



## **Mountain Province announces Q3 production results**

Mountain Province Diamonds, 49% per cent owner of the Gahcho Kué Diamond Mine, announced third quarter production results. Highlights included:

- The plant treated 759,000 tonnes during the quarter, 8% less than the same quarter last year because of a planned maintenance shut down in the plant
- 1,819,000 carats were recovered at an average grade of approximately 2.40 carats per tonne in Q3 2018. Q3 2018 recovered grade of 2.40 carats per tonne, was 8% higher than the same quarter last year and increases the year to date grade profile to 2.21 carats per tonne
- Tonnes mined in Q3 2018: 1,155,000 tonnes, or 3% higher than the same quarter last year

*(All figures reported on a 100% basis unless otherwise stated)*

### **Q3 2018 Production Summary**

The GK Mine operations had another solid quarter with over 11.6 million tonnes of material being mined. The recovered grade also continues to outperform expectations. The head grade in Q3 2018 was 2.40 carats per tonne which is significantly higher than originally anticipated. As a result, the year to date head grade at the plant has reached 2.21 carats per tonne which is 5% higher than our full year 2018 forecast grade. A planned maintenance shut down in the plant during the quarter resulted in less ore tonnes passing through the plant in comparison to what has been achieved in previous quarters of 2018. However, daily throughput in the plant continues to be consistent with year targets.

At September 30, 2018, the company remains well positioned to achieve the upper end of its full year 2018 production guidance of 6.3 – 6.6 million carats recovered.

The company also provides the details of its Q3 conference call which will take place on November 13th, 2018 at 11:00am EDT.

For the company's third quarter release, including production details, click [here](#).

### **Results of Mountain Province Diamonds' 8<sup>th</sup> diamond sale**

Total proceeds from the October 5 sale were US\$24.2 million (CDN\$31.4 million) from 366,505 carats at an average realized value of US\$66 per carat.

Results were in line with expectations and reflect current market conditions, the Gahcho Kué diamond partner said.

Good price bids for better quality larger goods where the majority of our value lies, were reported. In the lower qualities and smaller sizes, average price declines in the mid single digits. Mountain Province, in its [release](#), added that it believes rice pressure is predominantly driven by the recent rapid weakening of the Indian Rupee against the US Dollar and to some extent the seasonal lower demand for rough diamonds ahead of the Diwali celebrations.

The company also noted some good reporting of diamond retail jewellery sales particularly in the US where demand remains strong. This news is supportive as the major selling seasons for the US and Far East markets approaches. Consumer sentiment in the US remains strong on the

back of a healthy economy and strong labour market. The Chinese retail market, and the jewellery retail is also strong and showing positive momentum despite the most recent uncertainty in Chinese capital markets.



“The eighth sale of the year totalling US\$24.2 million was a good result considering the current market and time of the year and we did well to sell all our categories at current best market prices. We are encouraged to see positive diamond jewellery retail sales and we believe that with a positive retail selling season we will see better demand for rough diamonds in the near future,” said Stuart Brown, the company’s president and chief executive officer.

### **Prairie Creek all season road gets federal approval**

NorZinc Ltd. reports the responsible ministers under the Mackenzie Valley Resource Management Act have issued a decision adopting the Mackenzie Valley Review Board’s positive recommendation for approval of the report of environmental assessment and reasons for decision for the Prairie Creek all season road, which will provide long-term, year-round access to the Prairie Creek Mine.

“We are very pleased with this positive news from the Responsible Ministers,” said NorZinc President & CEO Don MacDonald. “I would like to thank all those involved in this process leading to this positive decision, in particular the leadership of the Naha Dehe Dene Band, the Liidlii Kue First Nation and the Dehcho first nations, the responsible ministers, the team at

NorZinc and all those who provided input and support in advancing to this positive decision. Our work will continue in the coming months towards issuance of the permit and to construction of the all season road and the additional facilities to bring the high grade Prairie Creek zinc-lead-silver mine into production. We will continue our advancement of engineering, our site de-risking process and progressing our financing and pre-construction activities. This includes updated financial, construction, operational and commercial arrangements ready for a construction decision in 2019.”

Construction could then begin in 2020 with production starting in potentially 2022.

In a decision dated October 9, 2018, the responsible ministers recommended the project be approved subject to the implementation of the mitigative measures and the company’s commitments as recorded in the report. These measure and commitments are to mitigate likely significant adverse environmental impacts and to address public concern. The RMs are the federal ministers of Fisheries, Oceans and the Canadian Coast Guard; Natural Resources; the Parks Canada Agency; as well as the Government of the Northwest Territories ministers of Environment and Natural Resources, Infrastructure, Lands, and Education, Culture and Employment.

“The responsible ministers and I believe that all the issues raised relating to potential adverse impacts from the proposed Project on asserted or established indigenous and/or treaty rights have been meaningfully and completely consulted on. As such, we have concluded our engagement and consultation process with potentially affected Indigenous governments and organizations on this environmental assessment,” said Carolyn Bennett, Minister of Crown-Indigenous Relations. View NorZinc’s release [here](#).

### **Tlichó all season road gets EA approvals**

The Tlichó All-Season Road, which will provide access to Fortune Minerals NICO project spur road, has received environmental assessment (EA) go-ahead from federal, territorial, and Tlichó governments, reports Fortune in its [October 30 media release](#).

The approvals incorporate modified measures developed together with the Tlichó Government through the consult to modify process with the Mackenzie Valley Environmental Impact Review Board. The Tlichó Government also approved the Board's recommendation with modifications.

The propose Tlichó road will stretch 97-kms from Highway 3 to Whati, NWT. Fortune's NICO cobalt-gold-bismuth-copper project is located 50 kms north of Whati and the company has already received EA approval to construct a spur road from Whati to the mine site.

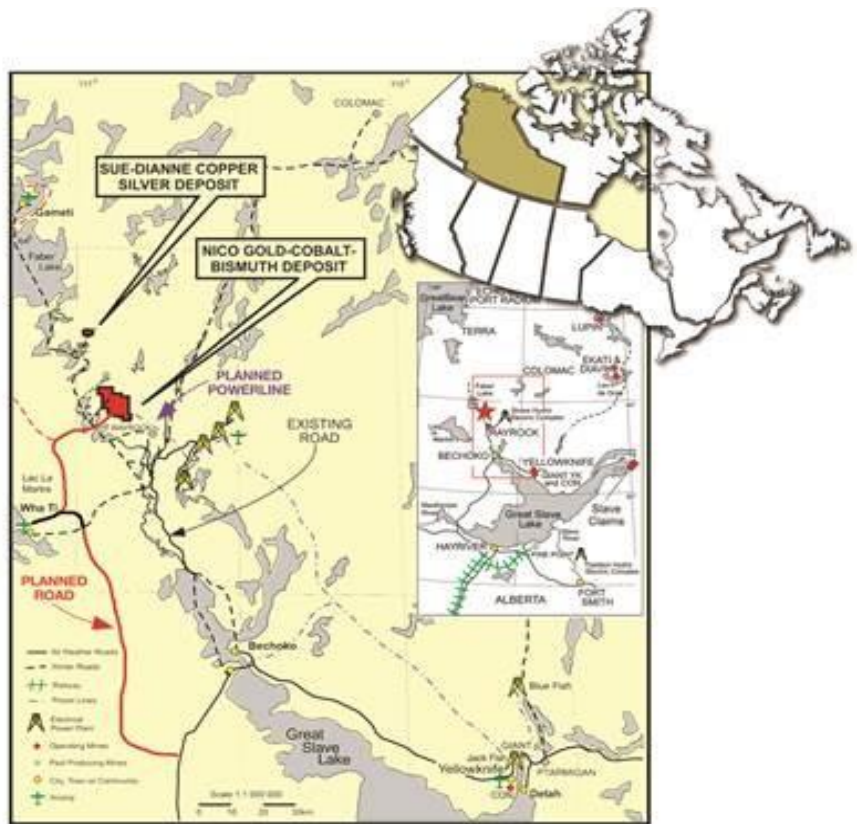
NICO is a primary cobalt asset and one of the few projects outside of the Congo that can be developed to support near-term growing demand for cobalt in lithium-ion batteries needed to power electric vehicles, portable electronic devices and stationary storage cells to support the growing green economy.

"We are pleased to see the approval (it) will contribute to the socio-economic growth of the Northwest Territories, reduce the cost of living in Whati, enable families to be more connected, and allow governments to provide services more effectively," said Robin Goad, Fortune



President and Chief Executive Officer. “It is also an important enabler for the NICO Project and a catalyst for other exploration, mining and hydro opportunities on Tlicho lands in this highly prospective geological area,” he added.

The Government of Canada will provide up to 25% of Tlicho road construction costs. The GNWT has also approved funding for construction of the remaining 75%. Three international consortia have already been shortlisted to provide proposals to fund, construct, operate and maintain the Tlicho road and be repaid by the GNWT with interest. The winning bid is expected to be announced shortly.



*In red, is the planned TASR and spur road to NICO. (Courtesy Fortune)*

For more on Fortune, see their [corporate presentation](#).

### **Agnico Eagle reports third quarter results**

Agnico Eagle Mines Limited reported quarterly net income of US\$17.1 million, or \$0.07 per share, for the third quarter of 2018.

This result includes non-cash foreign currency translation gains on deferred tax liabilities and non-recurring tax gains of \$11.8 million (\$0.05 per share) and non-cash foreign currency translation gains, mark-to-market adjustments and derivative gains on financial instruments of \$4.1 million (\$0.01 per share). Excluding these items would result in adjusted net income of \$1.2 million or \$0.01 per share for the third quarter of 2018. In the third quarter of 2017, the company reported net income of \$72.5 million or \$0.31 per share.

Included in the third quarter of 2018 net income, and not adjusted above, is non-cash stock option expense of \$3.8 million (\$0.02 per share).

In the first nine months of 2018, the company reported net income of \$67.0 million, or \$0.29 per share. This compares with the first nine months of 2017, when net income was \$203.3 million, or \$0.89 per share.

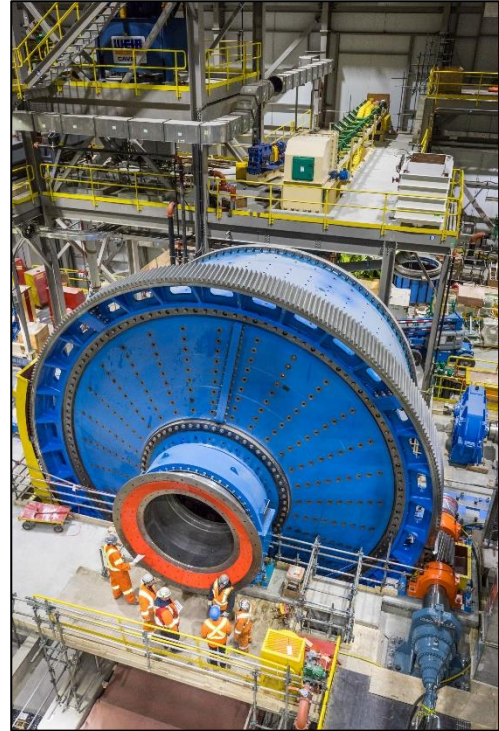
In the third quarter of 2018, cash provided by operating activities was \$137.6 million (\$155.0 million before changes in non-cash components of working capital), as compared with the third

quarter of 2017 when cash provided by operating activities was \$194.1 million (\$207.9 million before changes in non-cash components of working capital).

"Our Nunavut development projects are progressing well. Drilling continues to generate positive exploration results from the Amaruq underground deposits and we see potential for a slightly earlier startup at Meliadine. As a result, we now expect our 2019 gold production to exceed 1.70 million ounces, which was the mid-point of the previous 2019 guidance", added Mr. Boyd.

Click [here](#) for the full release which includes details on the following:

- Third quarter 2018 highlights & activities
- Meadowbank – strong third quarter performance
- Meadowbank mine - operating statistics
- Amaruq project – project continues to advance on schedule and on budget
- Exploration drilling continues to expand known mineralized zones at Amaruq
- Whale tail deposit conversion and deep exploration
- Vv zone - drilling outlines a potential new ore shoot at depth
- Meliadine project – boat sealift completed, construction activities are slightly ahead of schedule and on budget; potential to accelerate commencement of production



*Mine construction is progressing with potential for a slightly earlier start-up at Meliadine. Photo courtesy Agnico Eagle*

### **Sabina Gold & Silver expands Nuvuyak discovery at Back River Gold**

Sabina Gold & Silver Corp announced more results from the Nuvuyak discovery from the 2018 summer exploration diamond drilling program at its 100% owned Back River gold project in Nunavut Canada.

"The drilling of multiple new high-grade intercepts at Nuvuyak and a possible new zone at the Hook target area is now rapidly expanding the footprint of another major gold discovery at Back River. Although it is early days yet, we see a lot of similarities in the potential of the emerging Nuvuyak gold structure, when we compare it to the significant size and mineral tenure of the Goose Main deposit. Our team is very excited about this new discovery and it is another strong example of the organic growth we continue to achieve at Back River as we build towards the development of this world class district scale gold project," said Bruce McLeod, President and CEO.

Drilling has continued the new high-grade Nuvuyak discovery returning significant results.

Drill hole 18GSE558 returns new zones of:

- 16.39 g/t Au over 13.20 meters;
- 7.78 g/t Au over 12.40 meters;
- 13.32 g/t Au over 5.10 meters;
- 9.48 g/t Au over 9.10 meters;
- and 7.44 g/t Au over 6.40 meters

Initial drill intercepts have now been returned from follow up drill holes in the up-plunge direction of the initial discovery hole 18GSE545 which returned 11.58 g/t over 39.50m (see press release August 20, 2018).

Drilling for the 2018 summer season has now been successfully completed. Assay results will be released in a timely manner upon QAQC review, compilation and interpretation. An additional seven holes for the Nuvuyak zone have assays pending.

The Nuvuyak gold zone discovery intercept is located approximately 850 meters along strike to the west of the Goose Main deposit (Proven open pit Reserve of 3,266,000 tonnes grading 5.01 g/t totalling 526,000 ounces and an additional Probable open pit Reserve of 1,185,000 tonnes grading 4.98 g/t totalling 190,000 ounces) and approximately 1,000 meters down plunge. The mineralization is hosted within a polyphase folded sequence of the Back River lower iron formation stratigraphy and coincident gold structures that are interpreted as being a significant component of the major mineralizing horizon(s) at the Goose Property. Mineralization consists of arsenopyrite, pyrrhotite and abundant visible gold over broad intercepts that are associated with quartz veining and moderate to strong amphibole and chlorite alteration.

Early interpretations of the Nuvuyak zone and its similarities to the high-grade Umwelt Vault zone recognize the potential for a large-scale mineral trend extending from Goose Main to Umwelt Vault that may transect large portions of the central Goose property, much of which is largely underexplored. [View release](#).

### **Chamber supports METC renewal, extension, and northern enhancement**

The NWT & Nunavut Chamber of Mines continues to support the federal Mineral Exploration Tax Credit – indeed the chamber is seeking that it be “enhanced”. In an October 25 letter to Finance Minister Bill Morneau, the Chamber recommend support for the following:

- Renewal of the Canada wide Mineral Exploration Tax Credit
- Renewal of the METC for not one year, but for a 3-year period
- A northern-specific METC that is double the incentive given in southern Canada

Accepting these recommendations is one piece in the Chambers efforts to support continued exploration which is vital to discovering deposits which lead to mines which generate jobs and business benefits. These changes will “help us level the very un-level playing field for exploration in the remote and high-cost north,” the Chamber wrote.

Over the last two decades, the NWT and Nunavut mining industry members have created important socio-economic benefits and, in so doing, have made significant strides in assisting Canada with Indigenous reconciliation.

Some key northern mining statistics are:

- Over 70,000 person years of employment of which half benefit southern Canadians;
- Of the northern half of the jobs, 14,000 person years are Indigenous, creating opportunities for meaningful, high paying, employment that did not exist in Indigenous communities before;
- Over \$26 billion in spending by the mines, of which \$17 billion has been with northern firms, and of these approximately \$6 billion in unprecedented Indigenous business; and
- Billions of dollars in various taxes and royalties paid to Federal and Territorial and Indigenous governments.

A steady 'conveyor belt' of exploration investment is needed increase the odds of mine discovery. Thankfully, the mining industry can be a renewable resource if exploration continues in perpetuity. But Natural Resources Canada reports dismal exploration investment over the past 11 years in the NWT, and over the past three years Nunavut it has declined significantly. This is in the face of improved markets and increased exploration investment in Canada.

The METC continues to be a key policy innovation in Canada that has proved critical for the mineral sector. The flow-through share regime it supports plays an essential role in attracting investment for small to medium sized, non-revenue generating exploration companies operating in Canada. Finance Canada estimated that every dollar of flow-through financing generates \$2.60 of exploration expenditures in Canada.

Chamber member companies use these funds to explore and some have made significant discoveries that have become or are likely to become producing mines. Without flow-through financing and the METC, they would not have been able to conduct the exploration necessary to make those discoveries.

These METC proposals will help grow the northern minerals industry and provide greater investor confidence. It will also provide a sense of stability in the overall marketplace for ancillary companies, suppliers and service providers, as well as for the cities, and the northern and Indigenous communities across Canada that depend on exploration and mining for growth, employment opportunities and local trade. A three-year extension also aligns with work on the Canadian Minerals and Metals Plan that would put Canada back at the top of the global minerals industry, a position we have sadly lost.

The Chamber added that an enhanced METC will help government advance its work on the new Arctic Policy Framework. With mineral development being appreciably the largest private sector contributor to all three territories' economies, the Arctic Policy will benefit from strong mineral exploration and production in northern Canada that benefits the country, the territories, and its communities.

For more on how our minerals industry works for all northerners, visit <https://miningnorthworks.com/benefits/>.

### **Avalon provides progress report on Nechalacho**

Avalon Advanced Materials Inc. provided a [progress report](#) on its 100% owned Nechalacho Rare Earths Project near Yellowknife, Northwest Territories, since announcing the re-activation of the Project on May 15, 2018. Concerns about security of supply of these critical elements are

growing, as the trade dispute between China and the United States escalates. China still controls over 90% of global primary rare earth supply and investors well remember when China restricted rare earths exports in 2010 over a territorial dispute in the South China Sea.

Over the past four months, Avalon has successfully renewed its Land Use Permit and completed the perimeter survey of several contiguous mineral claims in order to bring them to lease. The lease application has been submitted and approval is expected by late October. Avalon completed a field program in September to conduct additional sampling in the area of the T-Zone and Tardiff Lakes Zones to begin assessing their potential as sources of neodymium and praseodymium rich concentrates currently in high demand for magnet applications. Sampling was also done in the T-Zone to begin assessing the resource potential of widespread lithium mineralization occurring as the lithium mica polyolithionite. Lastly, work continued on the independent scoping study on the East Arm-Yellowknife Road and hydro power infrastructure corridor.

The recent field program resulted in 41 drill core and rock samples and 80 biogeochemistry samples being shipped for analysis for rare earths and lithium. Analytical results are expected in early November. The rare earths in the high-grade sections of the North T-Zone are contained largely in the ore mineral bastnaesite, which has a relatively high rare earth content of around 24% and may be easily concentrated by ore-sorting methods. Additional samples of the bastnaesite mineralization were collected for initial ore-sorting process testwork contemplated for this fall. Avalon plans to investigate the possibility of developing Nechalacho as a near-term, small-scale producer of Nd-Pr rich concentrates for export, potentially involving a low-cost mining, crushing and ore-sorting operation.

The South T-Zone is also known to contain lithium and rare earth mineralization, although the original exploration drilling in the 1980's was focused on beryllium and no formal resource estimate was established for rare earths or lithium. Once the assays are received for the core samples from the North and South T-Zones, Avalon intends to update the resource estimate for rare earths and develop a new resource model for lithium in these two deposits.

Previous work by Avalon at Nechalacho focused on the heavy rare earth-rich Basal Zone deposit, which was the subject of the company's 2013 Feasibility Study. In the course of drilling the Basal Zone, very high grade Nd-Pr mineralization in bastnaesite was intersected near surface in the Tardiff Lakes area, with grades of up to 10.78% total rare earth oxides over 11 metres being intersected. To better map the extent of the near-surface Tardiff Lakes mineralization, which is largely overburden covered, the field crew collected 80 biogeochemistry samples to test this method for outlining near-surface rare earth mineralization: a method which has proven to be very effective in recent exploration for lithium on the company's Separation Rapids property in northwestern Ontario.

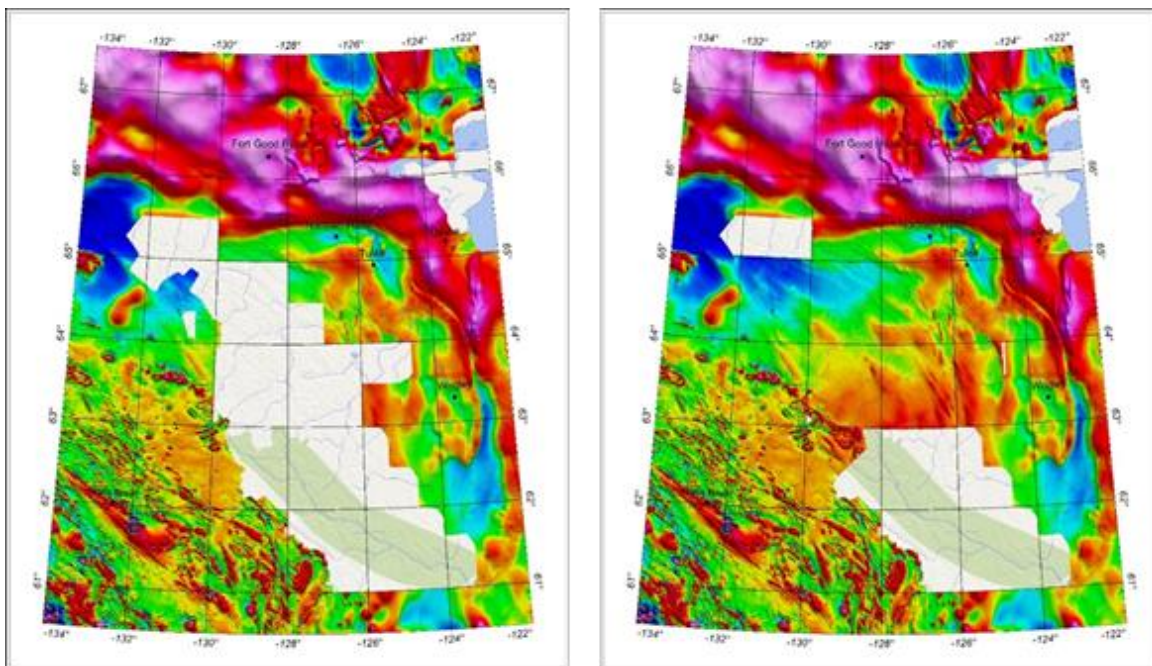
The Nechalacho Project is located in the traditional territory of the Akaitcho First Nations. Avalon would like to acknowledge the financial support of the Government of the Northwest Territories towards the infrastructure scoping study and the recent field program through a Mineral Incentive Grant.

## **Geophysical map data added to western NWT**

The Geological Survey of Canada (GSC) has completed several airborne geophysical surveys in the Northwest Territories' Mackenzie Mountains under the Geo-mapping for Energy and Minerals (GEM) Program, reports Natural Resources Canada.

Data released under GSC Open File report 8456 and the Northwest Territories Geological Survey Open File Report 2018-11 contains 11 total residual total magnetic field maps and 11 first vertical derivative of the total magnetic field maps. These reports can be downloaded from: <http://geoscan.nrcan.gc.ca>.

Data and geotiffs can be downloaded from <http://gdr.agg.nrcan.gc.ca>.



*Recent geophysical mapping has been completed in the Mackenzie Mountains by the GSC and released to the public.*

## **NWT diamond mines donate \$45,000 to support Rockhill apartment fire victims**

In the wake of the devastating fire at the Rockhill apartment building and the displacement of 33 families, De Beers Canada, Rio Tinto and Dominion Diamond Mines ULC have each pledged C\$15,000 for the Rockhill fire fund.

The funds will be delivered to the YWCA Yellowknife. Individuals and companies who wish to support the Rockhill Fire Fund are encouraged to contribute via the YWCA's online fundraising page at Canada Helps: <https://www.canadahelps.org/en/charities/ywcanwt/>.

## Exploration & development news briefs *(see Chamber [website](#) for more information)*

**Aston Bay Holdings** announced the results of its 3,135-metre, nine-hole 2018 summer exploration drilling program at its Aston Bay Property located on Somerset Island, Nunavut. The property is underlain by Paleozoic carbonate rocks prospective for high-grade copper and zinc mineralisation, with demonstrated affinities to the nearby past-producing Polaris zinc mine.

The program comprised seven holes at the Storm copper prospect and two along strike from the Seal zinc deposit. Targets were based primarily on interpreted gravity gradiometry anomalies proximal to known mineralisation at Storm and Seal. Unusually challenging weather reduced the planned meterage for this drill season and several anomalies remain untested. The majority of the drill holes were relatively shallow at approximately 300m or less.

At Seal, only two holes were completed due to challenging weather conditions and an initial focus on Storm targets (Figures 4 and 5). Nonetheless, drilling was successful in discovering an interpreted extension of the Seal mineralised system approximately 1.2 km southwards along strike, in the northernmost part of the Seal South area and adjacent to tidewater. Drill hole AB18-06B targeted the extreme northern end of an 800m long positive gravity gradiometry anomaly (S12 on Figure 5) coincident with local subcropping sphalerite-pyrite mineralisation. After passing through locally weakly mineralised sandstone and dolomite of the lower Ship Point Formation, host to the Seal deposit, the drill hole intersected significant sphalerite mineralisation between 109.5 m and 136.0 m within moderately to strongly altered pseudobreccia, pyrite/marcasite and rubbly dolostone and limestone of the Turner Cliffs Formation.

**Dunnedin Ventures** announced new diamond results from the kimberlite pipe KD900 and the completion of summer/fall field work at its 100% owned Kahuna Diamond Project in Nunavut, Canada. As noted in its July 19, 2018 news release, the company has drill-tested two historic kimberlite pipes (KD900 and KD230) and in addition, discovered a new pipe (KH10-11). All three kimberlites were tested using rotary air-blast (“RAB”) drilling during the summer and approximately one tonne of representative material was sent to CF Mineral Research Ltd. (“CFM”) in Kelowna, British Columbia for analysis. Further diamond results on KH10-11 and KD230 will be reported as received, with the next tranche of results expected later this fall. Any significantly diamondiferous kimberlite will require further drill-testing and possibly mini-bulk sampling to determine kimberlite geometry, diamond grade and size frequency distribution. Highlights include:

- Initial results from 133.32 kilograms of KD900 include 18 diamonds larger than the 0.106 mm sieve size. Diamond recovery results are presented in Table 1.

- Indicator minerals from KD900 confirm that while this pipe is diamondiferous, it is not the sole source of high-quality diamond indicator mineral (“DIM”) chemistry present in the Josephine Target Area (“JTA”).
- DIM chemistry and indicator dispersion in the JTA suggest undiscovered kimberlites with the potential to host larger diamonds occur near KD900 and up-ice.

**Nighthawk Gold** reports drill results on sixteen holes (4,035 metres) recently completed at its Treasure Island Gold Project (“Treasure Island”), located eleven kilometres north of Nighthawk’s Colomac Gold Project (“Colomac”), Northwest Territories, Canada (Figure 1). Drilling followed up on several shallow high-grade gold intersections previously reported from the 2011 Treasure Island program (see press release dated May 31, 2011). The recent drill program resulted in several new near surface discoveries, including a number of high-grade gold zones, and the successful expansion of known gold zones. All sixteen holes intersected mineralization (Table 1), with visible gold reported in fourteen of them. Highlights:

- T18-04B 46.25 metres of 3.31 gpt Au, including 21.75 metres of 6.23 gpt Au, and 7.75 metres of 14.20 gpt Au
- T18-06B 26.95 metres of 4.45 gpt Au, including 4.20 metres of 25.95 gpt Au
- T18-08B 11.75 metres of 10.78 gpt Au, including 6.50 metres of 19.15 gpt Au
- T18-03B 18.50 metres of 7.37 gpt Au, including 8.00 metres of 16.14 gpt Au, and 5.25 metres of 22.00 gpt Au
- New high-grade intercepts indicate the existence of additional sub-vertical stacked gold zones
- New discovery of shallow high-grade mineralization within the East Zone
- Drilling to date has defined a broad zone (200 metres wide) of strong mineralization that extends over 700 metres in length encompassing both the Main Zone and East Zone and remains open in all direction

**Osisko Metals** announced on October 22 assay results from 14 drill holes completed at the M-40 deposit at the west end of the East Mill Zone in the Pine Point Mining Camp (“PPMC”). Drill hole M40-18-PP-021 intersected 5.04% Zinc and 1.39% Lead over 11.16 metres and hole M40-18-PP-008 intersected 8.73% Zinc and 3.77% Lead over 3.85 metres.

All intersections are within a flat lying tabular-style deposit known as M-40 and all intercepts are located above 45 metre depths. (See 2018 Summer Drill Campaign East Mill Zone M-40).

The historical M-40 deposit currently measures 750 metres in strike length with an average mineralized width of approximately 340 metres. It occurs within the East Mill

Zone and is located 1.4 kilometres south of the electrical sub-station along a main haul road. The M-40 deposit was mined underground by Cominco and produced 350,870 tonnes of 5.5% Zinc and 2.2% Lead. Cominco Ltd. lists remaining unclassified historic resources of 1.76 million tonnes of 5.4% Zinc and 1.2% Lead at M-40 (not NI43-101 compliant). The East Mill Zone hosts eight deposits containing unclassified historical resources reported by Cominco Ltd. (1988) occurring over 7.6 kilometres. They are located to the east of the electrical substation and adjacent to the main haulage road along its entire length. Additional highlights are listed here.

**Osisko Metals** announced October 15 it has entered into an [agreement](#) with Canaccord Genuity Corp. on behalf of a syndicate of underwriters that includes Macquarie Capital Markets Canada Ltd, in connection with a "bought deal" private placement of 8,667,100 common shares of the Corporation that will qualify as "flow-through shares" (within the meaning of subsection 66 (15) of the Income Tax Act (Canada) at a price of \$0.75 per Flow-Through Share for aggregate gross proceeds of \$6,500,325. In addition, the Underwriters have been granted an option to sell up to an additional 1,733,420 Flow Through Shares at the Issue Price for additional gross proceeds of up to \$1,300,065.

**Osisko Metals** has joined forces with Osisko Gold Royalties Ltd and Osisko Mining Inc. to create the [Osisko Field Education Fund](#) for the Earth Sciences Department at the University of New Brunswick ("UNB"), and together have donated \$250,000 to the It Begins Here campaign, the largest fundraising effort ever undertaken by UNB.

Together alongside alumni, students, faculty, staff and corporate and community members, UNB surpassed its \$110 million goal by raising \$125 million dollars. The momentous fundraising campaign was dedicated to ensuring that students have the financial support they need to obtain a quality university education. This is a transformational event for the university.

**Osisko Metals** announced October 9 [assay results](#) from 14 drill holes completed in the East Mill Zone in the Pine Point Mining Camp. Drill hole EM-18-PP-140 intersected 13.91% Zinc and 7.56% Lead (21.47% Zinc + Lead) over 9.98 metres and hole EM-18-PP-152 intersected 4.22% Zinc and 2.56% Lead (21.47% Lead + Zinc) over 8.20 metres. All intersections are within a flat lying tabular-style deposit known as K-32 and all intercepts are located above 42 metre depths. (See 2018 Summer Drill East Mill Zone K-32).

The historical K-32 deposit currently measures 410 metres in strike length with an average mineralized width of approximately 65 metres. It occurs within the East Mill Zone that hosts eight historical deposits containing unclassified historical resources reported by Cominco Ltd. (1988). The K-32 deposit is located along the main haulage road, 3.9 kilometres to the east of the existing electrical sub-station and former mill site. The East Mill Zone

extends 7.6 kilometres to the east of the electrical substation and is adjacent to the main haul road along its entire length. Additional highlights are listed below in Table 1 and details are provided in Tables 2 & 3.

**Osisko Metals** announces that, following the company's Annual Shareholder Meeting held September 10, 2018, the shareholders have approved a new 10% rolling [stock option plan](#). Consequently, the company is granting incentive stock options to its directors, employees and consultants to acquire up to an aggregate of 1,598,400 common shares of Osisko Metals Incorporated. All the options grants are exercisable for a period of 5 years at a price of \$0.70 per share. The options grants are subject to a vesting period of 3 years and all common shares issuable pursuant to the exercise of options are subject to a hold period of four months and one day from the date of the option grant.

**Stornoway Diamond** provided [production and sales results](#) at the Renard Diamond Mine for the quarter ended September 30, 2018. Highlights are as follows:

- 184,620 carats sold in two tender sales for gross proceeds<sup>1</sup> of \$24.7 million<sup>2</sup> at an average price of US\$103 per carat (\$134 per carat<sup>2</sup>). Third quarter diamond sales represent diamonds recovered during the second quarter.
- Third quarter diamond production was 329,306 carats produced from the processing of 597,761 tonnes of ore at an average grade of 55 cpht. Grade and carat recoveries improved by 39% and 47% respectively compared to the second quarter with the mining of higher grade ore.
- Ramp-up of the underground mine to its design capacity of 6,000 tonnes per day was successfully achieved at the end of August.

**TerraX** announced the company has agreed to a non-brokered [private placement](#) of 3,750,000 units of the company at a price of \$0.40 per Unit to raise aggregate gross proceeds of \$1.5 million.

Each Unit shall consist of one common share and one transferable common share purchase warrant. Each Warrant shall be exercisable into one additional common share of the company for a period of three years from closing at an exercise price of \$0.60.

The net proceeds of this financing are to be used to fund the company's general and administrative expenses and to complete targeting for the drill program planned for early 2019. Certain directors and officers of TerraX will be participating in this private placement. The closing is anticipated to occur on or before November 16th 2018, subject to acceptance for filing by the TSX Venture Exchange. All securities issued will be subject to a statutory hold period in Canada expiring four months and one day from the date of closing.

**TerraX Minerals** [announced](#) completion of a helicopter-borne high resolution magnetic and radiometric survey



over the Quyta-Bell property of the Yellowknife City Gold Project (YCGP). This 6409 line-kilometer survey was completed by Precision GeoSurveys Inc., of Langley, BC. A 434 square kilometer airborne LiDAR survey was also completed over the Quyta-Bell property by LiDAR Services International Inc. of Calgary, AB. Maps of the airborne geophysical and LiDAR coverage are available here. These surveys received funding support totaling \$160,000 (CDN) through the government of the Northwest Territories (GNWT) Mining Incentive Program (MIP). The MIP is administered by the Industry, Tourism and Investment ministry (ITI) of the GNWT.

**TerraX Minerals Inc.** announced [further assay results](#) from the company's 2018 summer field program on the Yellowknife City Gold (YCG) project. A total of 262 samples were taken on the company's Northbelt target which represents the possible extension of Con-Giant trend and constitutes the core focus area.

Preliminary surface exploration in the northwestern extension of the geology recognized to contain the extension of the Con-Giant gold system has yielded positive results. This area contains multiple sub-parallel gold structures, including the Oro Shear, recognized from exploration dating back to the 1930s. TerraX carried out mapping and prospecting along these gold bearing structures, including grab rock samples. A map showing the location and results can be seen in the full release.

TerraX has also acquired detailed geological maps, channel sampling results, and drill hole logs and assay results from an area southwest of the sampling at Oro, specifically on the high grade Shear 17/18 target (news release August 4, 2015).

**ValOre Metals Corporation** announces that it intends to proceed with a rights offering. The full amount of the rights offering is expected to be C\$2.45 million, and a standby guarantee, to be provided by Mr. James Paterson, the Chief Executive Officer, a director and a shareholder of the company, will ensure that a minimum of \$880,000 is raised under the Rights Offering. To ensure that ValOre can meet its short-term capital requirements and continue its operations until the closing of the Rights Offering, the Lender has agreed to lend the company up to C\$1 million. In advance of the Rights Offering, on October 25, 2018, the Lender and the company entered into a loan agreement pursuant to which the Lender has agreed to advance up to C\$1 million to the company on a revolving basis in order to enable ValOre to meet its short-term capital requirements (the "Bridge Loan"). The Bridge Loan is unsecured and will mature on the earlier of the completion of the Rights Offering and March 4, 2019.

**Western Atlas Resources** [announced](#) additional positive results from its 2018 field and interpretive work on its Meadowbank Project in Nunavut.

The results pertain to the:

- Completion of the 3rd grid of induced polarization survey ("IP") carried out on the company's Block B by Peter E. Walcott & Associates Ltd. (Walcott)
- Completion of the electromagnetic anomaly picking report ("EM") by Geotech Ltd. (Geotech), and
- Receipt of the final set of results from the geological sampling
- Highlights from the 3rd grid IP survey, EM report and geological results

### Calendar of events

- **46<sup>th</sup> Annual Yellowknife Geoscience Forum**, the North's largest combined tradeshow and conference, November 20-22, 2018, in Yellowknife. Online delegate registration is now open, click [here](#).
- **NWT Excellence in Mining and Exploration Awards**, November 22 at the Explorer Hotel in Yellowknife. [Purchase tickets](#) through the Geoscience Forum web site (click register for events only).
- **Giant Mine Remediation Industry Day**, November 26 at the Explorer Hotel in Yellowknife. Government is hosting a one-day conference to help prepare local and Indigenous businesses to participate in procurement opportunities at the site. To attend, email [geneva.irwin@canada.ca](mailto:geneva.irwin@canada.ca) by November 14.
- **Energy & Mines World Congress**, December 10-11, 2018, Toronto <http://worldcongress.energyandmines.com/>
- **Association for Mineral Exploration Roundup**, Vancouver, January 28-31, 2019.
- **PDAC 2019 convention**, March 3-6, 2019, at the Metro Toronto Convention Centre.

## Welcome new members!

On behalf of our members, we would like to welcome the following new members to the Chamber of Mines. We encourage your support of their business. Please join us in a warm welcome to:

- **Devonian Metals Inc.**, based in Delta, BC., is an exploration company. Contact is [tgerke@devonianmetals.com](mailto:tgerke@devonianmetals.com).
- **Elemental Controls Ltd.**, based in Mississauga, ON, is a consulting service/supply company. Contact is Keith Grattan, [kgrattan@elementalcontrols.com](mailto:kgrattan@elementalcontrols.com), and their web site is [www.elementalcontrols.com](http://www.elementalcontrols.com).
- **Ferus NGF Inc.**, based in Calgary, AB, is a consulting service/supply company. Contact is [blairelancaster@ferus.com](mailto:blairelancaster@ferus.com) and their web site is [www.ferus.com](http://www.ferus.com).
- **Gray Matters Design + Marketing Inc.**, based in Yellowknife, NT, is a consulting service/supply company. Their contact is Kathy Gray [kathy@gmdm.ca](mailto:kathy@gmdm.ca) and web site is [www.gmdm.ca](http://www.gmdm.ca).
- **Laurentian University – Harquail School of Earth Sciences**, is a Sudbury, ON based educational/training institution which also focusses on mining industry collaborative research. Contact is Roxane Mehes [rmehes@laurentian.ca](mailto:rmehes@laurentian.ca) and their web site is <http://hes.laurentian.ca/>.
- **Potti Corp.**, based in Calgary, AB, is a consulting service/supply company. Contact is Colin Kryski [info@potticorp.ca](mailto:info@potticorp.ca) and their web sites are [www.potticorp.ca](http://www.potticorp.ca) and [www.briefrelief.ca](http://www.briefrelief.ca).
- **Rover Metals Corp.**, based in Vancouver, is an exploration company. Contact is [ron.woo@rovermetals.com](mailto:ron.woo@rovermetals.com) and their web site is [www.rovermetals.com](http://www.rovermetals.com).
- **Sprung Structures**, based in Aldersyde, AB is a supply/services company. Contact is Lynne Douglas [sprung@sprung.com](mailto:sprung@sprung.com) and their web site is [www.sprung.com](http://www.sprung.com).
- **True North Safaris Ltd.**, is a service company based in Yellowknife, NT which provides tourism and meeting/event facilities. Contact is Malcolm Jaeb [gary@truenorthsafaris.com](mailto:gary@truenorthsafaris.com) and web site is [www.truenorthsafaris.com](http://www.truenorthsafaris.com).
- **Western Atlas Resources**, based in Vancouver, BC is an exploration company. Contact is Susan Rubin at [srubin@westernar.com](mailto:srubin@westernar.com) and their web site is [www.westernar.com](http://www.westernar.com).
- **Wood Canada Ltd.**, based in Yellowknife, NT provides consulting/research, engineering, and environmental services. Contact is [katrina.nokleby@woodplc.com](mailto:katrina.nokleby@woodplc.com) and their web site is [www.woodplc.com](http://www.woodplc.com).



*NorZinc's proposed Prairie Creek Zinc-Silver-Lead mine, NWT. Photo courtesy NorZinc*

## Member news releases this past month

- 1 November 2018 [Western Atlas announces additional positive exploration results at Meadowbank](#)
- 1 November 2018 [TerraX arranges \\$1.5 million financing](#)
- 30 October 2018 [Fortune reports government approvals for the Tlicho All-Season Road](#)
- 29 October 2018 [Rover Metals announces geochemistry results from Cabin Lake Gold Project](#)
- 26 October 2018 [TerraX summer exploration program continues to expand Northbelt target](#)
- 25 October 2018 [Baffinland receives successful conformity decision for phase 2 expansion](#)
- 24 October 2018 [Agnico Eagle reports third quarter results](#)
- 24 October 2018 [Baffinland sponsors RPAN's Recreation Leader of the Year award](#)
- 23 October 2018 [De Beers Q3 production report](#)
- 23 October 2018 [Aston Bay announces results of 2018 summer drilling program](#)
- 23 October 2018 [Mountain Province announces Q3 results and provides details of conference call](#)
- 22 October 2018 [Nighthawk reports multiple high-grade gold intercepts at Treasure Island](#)
- 22 October 2018 [Osisko intersects 6.43%Zn+Pb over 11.16m and 12.5%Zn+Pb over 3.85m, Pine Point](#)
- 22 October 2018 [Sabina expands Nuvuyak Discovery at Back River with multiple new gold Intercepts](#)
- 22 October 2018 [De Beers Canada named one of Canada's safest employers for 2<sup>nd</sup> consecutive year](#)
- 18 October 2018 [Mountain Province Diamonds results of eighth diamond sale of 2018](#)
- 15 October 2018 [TMAC permitting; NIRB recommendation for Madrid-Boston certificate accepted](#)
- 15 October 2018 [Osisko Metals announces \\$6.5 million "bought deal" financing, flow-through shares](#)
- 12 October 2018 [Baffinland receives successful conformity decision for Phase 2 expansion](#)
- 11 October 2018 [Stornoway reports third quarter 2018 production and sales results](#)
- 10 October 2018 [Positive recommendation on Prairie Creek all season road adopted by ministers](#)
- 10 October 2018 [Osisko Metals participates in a \\$250,000 donation to UNB for education fund](#)
- 10 October 2018 [Avalon provides progress report on Nechalacho Rare Earths Project, NWT](#)
- 9 October 2018 [Silver Range samples high grade gold at Tree River Project, Nunavut](#)
- 9 October 2018 [Osisko Metals intersects 21.47% Zn+Pb over 9.98 metres at Pine Point](#)
- 9 October 2018 [TerraX completes magnetic, radiometric and LiDAR surveys at Quyta-Bell property](#)
- 4 October 2018 [Dunnedin recovers diamonds from KD900 kimberlite pipe; completes fall sampling](#)
- 3 October 2018 [NWT diamond mines donate \\$45,000 to support Rockhill apartment fire victims](#)
- 3 October 2018 [Baffinland and the QIA sign amended Mary River Project IIBA](#)
- 3 October 2018 [Osisko Metals grants stock options](#)

## Some members' corporate presentations

- [Auryn Resources, September 2018](#)
- [Kennady Diamonds, H1 2018](#)
- [NxGold, September 2018](#)
- [Rover Metals corporate video, October 2018](#)
- [Fortune Minerals NICO project, September 2018](#)



*2017-18 Ekati Independent Environmental Monitoring Agency annual report summary.*

## Geoscience Forum approaching!

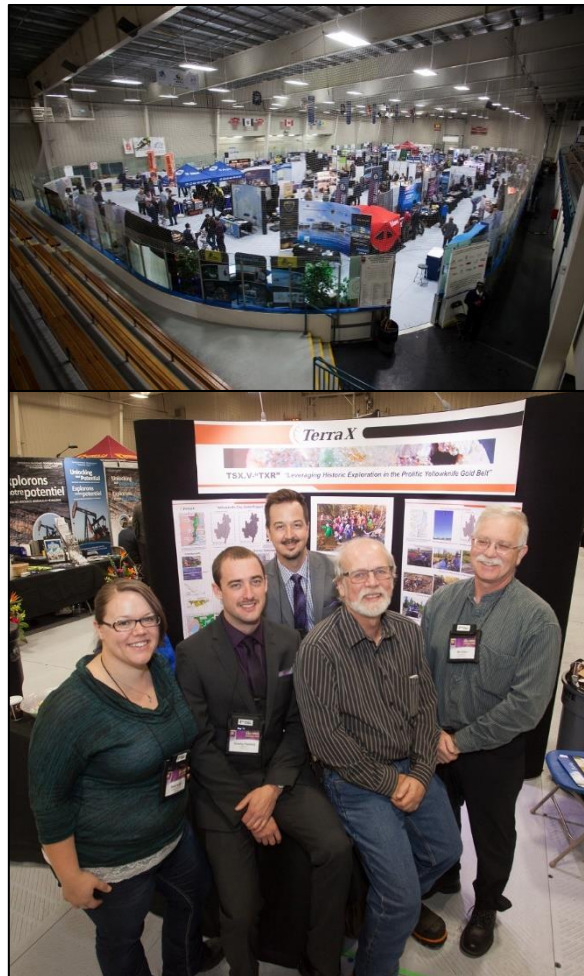
The 46th Annual Yellowknife Geoscience Forum, the North's largest combined tradeshow and conference, will be held November 20-22, 2018 in Yellowknife. For on-line delegate registration, click [here](#).

Talks and poster displays will be held at the Capital Theatre. For all the details visit [geoscienceforum.com](http://geoscienceforum.com).

And don't forget to check in early if you can! Check-in is Monday, November 19 from 1 p.m. to 4 p.m. at the Capital Theatre. The Charles Camsell Lecture will feature Yellowknife historian Ryan Silke. This free public event will be held Wednesday, November 21, 7:30 p.m. at the Prince of Wales Northern Heritage Centre. The trade show, open to the public from 10 a.m. to noon on Thursday, November 22, will be held at the Multiplex arena.

The Geoscience Forum is an initiative of the NWT & Nunavut Chamber of Mines and the Government of the Northwest Territories department of Industry, Tourism and Investment.

For Twitter #YKGeo2018 and on Facebook @IndustryTourismInvestmentGNWT



*The 46<sup>th</sup> annual Yellowknife Geoscience Forum is scheduled Nov 20-22. Pictured top is last year's trade show at the multiplex arena, above is the TerraX team, and below, delegates check out the posters series. GNWT photos*



## MAX Awards tickets available

Tickets for the second annual NWT Mining and Exploration awards are now available!

To purchase tickets, go to the [2018 Geoscience Forum link](#) and complete the registration process (register for events).

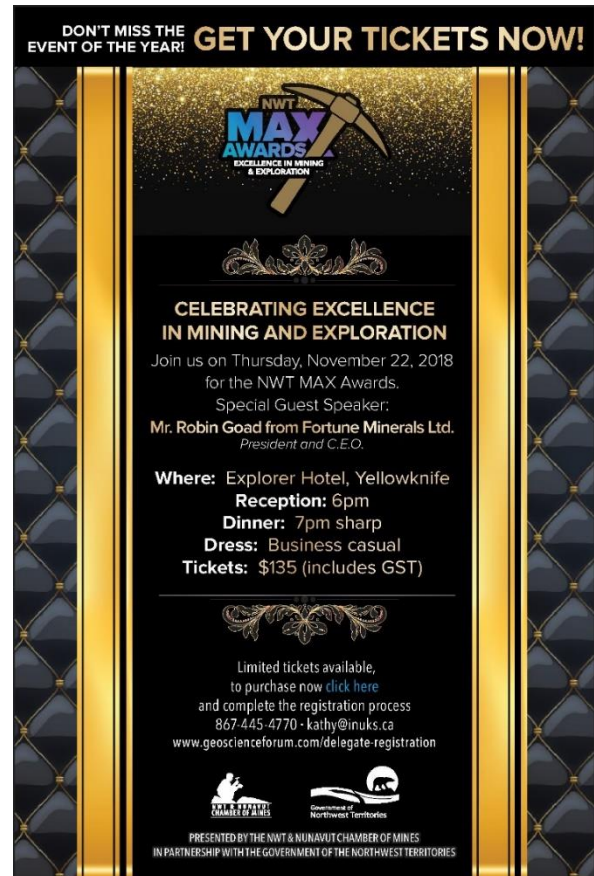
Celebrating and encourage excellence in mining and exploration, the awards are co-sponsored by the NWT & Nunavut Chamber of Mines and the Government of the Northwest Territories. MAX awards recognize northern individuals, businesses, and organizations that have generated opportunities and demonstrated leadership in responsible and successful resource development.

Categories for the awards include:

- Distinguished Service
- Economic Leadership
- Environmental & Social Responsibility
- Indigenous Achievement Awards
- Special Achievement Awards

Guest speaker for the event, scheduled November 22 at the Explorer Hotel in Yellowknife, will be Fortune Minerals CEO Robin Goad. Fortune is progressing its NICO cobalt-gold-bismuth-copper project which could be producing in 2022.

Visit the MAX Awards [portal](#) for more information.



DON'T MISS THE EVENT OF THE YEAR! **GET YOUR TICKETS NOW!**

**NWT MAX AWARDS**  
EXCELLENCE IN MINING & EXPLORATION

**CELEBRATING EXCELLENCE IN MINING AND EXPLORATION**

Join us on Thursday, November 22, 2018 for the NWT MAX Awards.  
Special Guest Speaker:  
**Mr. Robin Goad** from Fortune Minerals Ltd.  
*President and C.E.O.*


**Where:** Explorer Hotel, Yellowknife  
**Reception:** 6pm  
**Dinner:** 7pm sharp  
**Dress:** Business casual  
**Tickets:** \$135 (includes GST)

Limited tickets available, to purchase now [click here](#) and complete the registration process  
867-445-4770 • [kathy@inuks.ca](mailto:kathy@inuks.ca)  
[www.geoscienceforum.com/delegate-registration](http://www.geoscienceforum.com/delegate-registration)

PRESENTED BY THE NWT & NUNAVUT CHAMBER OF MINES  
IN PARTNERSHIP WITH THE GOVERNMENT OF THE NORTHWEST TERRITORIES

## Chamber of Mines' Social Media

Follow via live Twitter and Facebook links.



**Northern Mining News** is written and published by the NWT & Nunavut Chamber of Mines for free distribution electronically to those interested in the northern minerals industry. Subscribe on our website.

For further information contact us at:  
#103, 5102 50 Ave, Yellowknife, NT X1A 3S8  
Email: [info@miningnorth.com](mailto:info@miningnorth.com)  
Website: [www.miningnorth.com](http://www.miningnorth.com)

What's happening around town ...

MINE TRAINING SOCIETY


# GET IN ON THE GROUND FLOOR



## INTRODUCTION TO THE MINING INDUSTRY

**APPLICATION DATE: DECEMBER 1, 2018**  
**COURSE DATE: JANUARY 9, 2019**  
**COURSE LOCATION: LUTSEL K'E**

**TO BE CONSIDERED, APPLICANTS MUST:**

- Be 18 years of age prior to start of the program
- Have a minimum of Grade 10 with transcripts
- Provide an up-to-date resume, a letter of interest and two references
- Supply a copy of a photo ID



For application forms contact the Mine Training Society • Telephone: 867-765-0445



**K'atl' Odeeché First Nation**

## KFN Mining Symposium

**November 14<sup>th</sup> and 15<sup>th</sup>, 2018**

**Chief Lamalice Complex  
K'atl' Odeeché First Nation Reserve**

*Doors open at 9:00 am each day. Admission is free.*

- Osisko Metals will be in attendance to provide updates and background information on the Pine Point Mine Project.

*Keynote speaker*

- Chief Clarence Louie of the Osoyoos Indian Band will discuss aboriginal business and Economic development.

Some additional organizations presenting include:

- Mackenzie Valley Land and Water Board
- Aurora College
- and more

Please contact **Keith** at 867-875-7690 or email [keith\\_hill@gov.nt.ca](mailto:keith_hill@gov.nt.ca) to book a trade show booth.

Lunch provided  
November 14<sup>th</sup>  
and 15<sup>th</sup>

Tradeshow  
booths  
available for  
\$100




# GET IN ON THE GRO

## INTRODUCTION T

**APPLICATION DATE: DECEMBER 1, 2018**  
**COURSE DATE: JANUARY 9, 2019**  
**COURSE LOCATION: FORT PROVIDENCE**

**TO BE CONSIDERED, APPLICANTS MUST:**

- Be 18 years of age prior to start of the program
- Have a minimum of Grade 10 with transcripts
- Provide an up-to-date resume, a letter of interest and two references
- Supply a copy of a photo ID






For application forms contact the Mine Training Society • Telephone: 867-765-0445 • Email: [mts@minetraining.ca](mailto:mts@minetraining.ca)

## Mines & promising Northwest Territories mine projects

The following table describes leading mineral development projects in the NWT.

Project Name	Owner(s)	Commodity	Description	Status
<a href="#">Ekati Mine</a>	<a href="#">Dominion Diamond Mines</a> , and Dr. Stewart Blusson	Diamonds	Canada's first and largest diamond mine, 310 km. NE of Yellowknife. Open pit and underground. Mine life potentially to 2041. Workforce in 2017, 1,734. The Ekati mine consists of two joint ventures, the core zone joint venture and the buffer zone joint venture, in which the company has interests of 88.9% and 72.0%, respectively. Reserves at 31 January 2017 were 68.9 million tonnes at 1.5 carats per tonne for 105.4 million carats. Inferred mineral resources were 20.6 million tonnes at 1.0 carats per tonne for 19.8 million carats. Additionally, Fox Deep indicated and inferred resources of 51.0 million tonnes at 0.4 carats per tonne for 18.7 million carats.	Media release, 1 November 2017, Dominion Diamond announces completion of plan of arrangement which saw the private corporation, The Washington Group of Companies, acquire Dominion Diamond Corporation and its interests in the Ekati and Diavik diamond mines.
<a href="#">Diavik Mine</a>	<a href="#">Rio Tinto</a> (operator) & <a href="#">Dominion Diamond Mines</a>	Diamonds	Canada's largest producer of diamonds, 300 km NE of Yellowknife. Mine life to 2025. Became all underground mine in 2012. Workforce in 2017, 1,233. New A21 open pit development will cost US\$350m over 4 years. A21 commence ore production in the first half 2018. Reserves at Dec 31, 2017 were 15.1 million tonnes at 2.8 carats/tonne for total of 42.5 million carats.	Media release, 1 October 2018 Diavik Stars of the Arctic dazzle in rough diamond tender
<a href="#">Gahcho Kué Mine</a>	<a href="#">De Beers Canada</a> (51% and operator) and <a href="#">Mountain Province</a> (49%)	Diamonds	Located approximately 280 km NE of Yellowknife, NWT. Open pit mine with life of 12 years. Mine reached commercial operation in Q1 2017. Workforce in 2017, 483. Plan is for three open pits to mine 5034, Hearne and Tuzo ore bodies producing average of 4.5 million carats/year. Hearne began production in April 2018. Reserves at 31 March 2014 (production commenced Q3 2016) were 35.4 million tonnes at 1.6 carats per tonne for 55.5 million carats.	Media release, 23 October 2018 Mountain Province announces Q3 results and provides details of conference call Media release, 23 October 2018 De Beers Q3 2018 production report Media release, 22 October 2018 De Beers Canada named one of Canada's safest employers for second consecutive year Media release, 18 October 2018 Mountain Province Diamonds results of eighth diamond sale of 2018
<a href="#">Prairie Creek</a>	<a href="#">NorZinc</a> (formerly <a href="#">Canadian Zinc Corporation</a> )	Zinc-lead-silver	Proposed underground mine 120 km W of Ft. Simpson. Estimated mine jobs: 220 All permits now in place to construct and operate the mine. Feasibility Study completed in 2017 supports 15-year mine life. Subject to completion of financing, and 2.5-year construction phase, production proposed for mid-2020. In 2017, the Mackenzie Valley Environmental Impact Review Board recommended approval of the proposed all season road.	Media release, 10 October 2018 Positive recommendation on Prairie Creek all season road adopted by ministers

## NWT & Nunavut Chamber of Mines – Northern Mining News

			Over the past eight years Canadian Zinc has successfully completed numerous environmental assessments related to exploration and development of the Prairie Creek Mine. Canadian Zinc has obtained all the significant regulatory permits and social licences required to complete construction and development and undertake mining and milling at Prairie Creek, including construction and use of a winter access road to the minesite.	
NICO	Fortune Minerals Ltd.	Cobalt-gold-bismuth-copper	Proposed open pit and underground mine located 50 km NE of Whati. Estimated mine jobs: 150. Mine life, 20 years. In March 2018, The Mackenzie Valley Environmental Impact Review Board has recommended that the Tlicho all-season road be approved. The approval is subject to measures designed to mitigate potential environmental, social, and cultural impacts. The Government of the Northwest Territories, Department of Transportation and Tlicho Government received this conditional approval on March 29, 2018, enabling construction of the 97-kilometre Tlicho Road to connect the community of Whati to the territorial highway system.	Media release, 30 October 2018 Fortune reports government approvals for the Tlicho All-Season Road
Kennady North	Mountain Province Diamonds	Diamonds	Kennady North project comprises 13 leases and claims immediately to north and west of 4 leases controlled by the Gahcho Kué Joint Venture (see above). Project aims to identify a resource along the Kelvin – Faraday kimberlite corridor of between 12 and 15 million tonnes at a grade of between 2 and 2.5 carats per tonne and to identify new kimberlites outside of the corridor. The Kelvin – Faraday corridor is a target for further exploration. Potential quantity is conceptual as there has been insufficient drilling to define a mineral resource and it is uncertain if further exploration will result in target being delineated as a mineral resource.	
Indin Lake	Nighthawk Gold	Gold	Nighthawk controls over 90% of the prospective Indin Lake Greenstone Belt in this historic gold camp with a total ground position now comprising 930 sq km, approximately 220 km north of Yellowknife, NT. The Indin Lake Greenstone Belt is one of Canada's most underexplored gold camps. The property contains 14 known gold deposits and showings, 3 are historic mines (eg Colomac)	Media release, 22 October 2018 Nighthawk reports multiple high-grade gold intercepts at Treasure Island further demonstrating untapped potential of the Indin Lake Gold Camp
Pine Point	Osisko Metals	Lead-zinc	Proposed open pit mine east of Hay River, NT. 10 open pits mined	Media release, 22 October 2018 Osisko Metals intersects 6.43% zinc+lead Over



			<p>sequentially with 321 jobs. PEA quotes 13-year mine life. Osisko Metals has begun active exploration to advance the project. The objective of the 2018 drill program is to upgrade approximately 50 million tonnes of unclassified near-surface historical resources (Cominco Ltd.) to NI43-101 Inferred Mineral Resources as quickly as possible in areas amenable to open pit mining. The 2018 program consists of approximately 700 drill holes (323 now completed) within the Main Trend, a 20- kilometre long, portion of the PPMC that is located on the south shore of Great Slave Lake in the NWT, near infrastructure and paved highway access and with 100km of haulage roads already in place.</p>	<p>11.16m and 12.5% zinc+lead Over 3.85m at Pine Point</p> <p>Media release, 15 October 2018 Osisko Metals announces \$6.5 million "bought deal" financing of flow-through shares</p> <p>Media release, 10 October 2018 Osisko Metals participates in a \$250,000 donation to UNB for education fund</p> <p>Media release, 9 October 2018 Osisko Metals intersects 21.47% zinc+lead over 9.98 metres at Pine Point</p>
Courageous Lake	Seabridge Gold Inc.	Gold	<p>Proposed open pit mine 240 km NE of Yellowknife. 6.5 M oz proven and probable reserves in 91.0 million tonnes at 2 g/t (2016 Annual Report). Positive PFS July 2012. The FAT deposit is one of Canada's largest undeveloped gold projects. Seabridge is currently focusing on their KSM mine and other BC projects.</p>	<p>Media release, 9 August 2018, Seabridge Gold files second quarter report to shareholders and its financial statements and MD&amp;A</p>
Selwyn (Howard's Pass Project)	Selwyn Chihong Mining Ltd.	Zinc, lead	<p>Proposed base metal mine in Yukon on NWT border and access is through NWT. Agreements signed with NWT (Sahtu) Indigenous land corporations. The project will process multiple open pit mines over an approximate 10+ year mine life and includes a mineral processing plant, tailing management facility and the required on-site infrastructure. The mine is being designed to process 38,500 tonnes per day (tpd) of ore which, after processing, is expected to result in 2,500 tpd of zinc and 600 tpd of lead concentrate, which would be trucked to the Port of Stewart for export. Selwyn Chihong estimates the proposed mine will create approximately 1500 jobs during construction and approximately 750 during operation.</p>	<p>Selwyn Chihong Mining's proposed upgrade of a road to its lead-zinc mining project in Yukon's Selwyn Mountains will undergo an environmental assessment. Parks Canada has referred the 79km Howard's Pass Access Road (HPAR) to Environmental Assessment under the MVEIRB, which accepted the referral in July 2015. The HPAR was developed in the 1970s and runs from the Nahanni Range Road to the NWT-Yukon border. Passing through 2 national parks. Yukon media reported in Feb 2016 that Selwyn Chihong has decided to slow their project down due to the current low zinc prices and will not to take the project to the permitting stage this year. According to External Affairs VP Maurice Albert, SC has opted for a traditional drilling program and hopefully add another 10 years to the mine life.</p>
Nechalacho	Avalon Advanced Materials Inc.	Rare earth metals	<p>Proposed underground mine 100km SE of Yellowknife. Estimated mine jobs: 200. The company remains optimistic that rare earth demand will recover sufficiently to advance the project.</p>	<p>Media release, 10 October 2018 Avalon provides progress report on Nechalacho Rare Earths Project, Yellowknife, NWT</p>

## Mines & promising Nunavut mine projects

The following table describes leading mineral development projects in Nunavut.

Project	Owner(s)	Commodity	Description	Status
<a href="#">Meadowbank Gold Mine</a>	<a href="#">Agnico Eagle Mines</a>	Gold	In operation since 2010. Open pit mine located in the Kivalliq Region, 300 km west of Hudson Bay and 70 km N of Baker Lake. Mine jobs: 775 AEM announced they will develop Amaruq satellite deposit, 50km from minesite and add 6 years to mine life, beginning in 2019. Construction of the Amaruq Exploration Access Road commenced in first quarter 2016. Road construction is ongoing with nine kms completed to date of expected total length of 64kms.	24 October 2018 Agnico Eagle reports third quarter results
<a href="#">Mary River Iron Mine</a>	<a href="#">Baffinland Iron Mines Corporation</a>	Iron	In operation since September 2014; Open pit mine 936 km N of Iqaluit. Mine jobs: 602 Production from Early Revenue Phase (ERP) began September 8, 2014. The company has proposed a Phase 2 project with increased production and shipping. AANDC Minister has approved application for exemption from NPC negative conformity determination, July 2015.	Media release, 25 October 2018 Baffinland receives successful conformity decision for phase 2 expansion  Media release, 24 October 2018 Baffinland sponsors RPAN's Recreation Leader of the Year award  Media release, 12 October 2018 Baffinland receives successful conformity decision for Phase 2 expansion  Media release, 3 October 2018 Baffinland and the QIA sign amended Mary River Project Inuit Impact Benefit Agreement  Media release, 2 October 2018 Baffinland responds to positive variance of Nunavut Impact Review Board decision
<a href="#">Hope Bay (Mine began commercial production May 15, 2017)</a>	<a href="#">TMAC Resources Inc.</a>	Gold	Gold mine 130 km S of Cambridge Bay. TMAC's property covers the majority of the Hope Bay Greenstone Belt. Workforce in 2016: 335 First gold poured in first quarter 2017 and achieved commercial production in second quarter 2017.	Media release, 15 October 2018 TMAC makes important permitting step forward; minister accepts NIRB recommendation for a new Madrid-Boston project certificate
<a href="#">Meliadine</a>	<a href="#">Agnico Eagle Mines Ltd.</a>	Gold	Proposed open pit and underground gold mine, 25 km NE of Rankin Inlet. Estimated construction jobs: 1,000 Estimated mine jobs: 700 IIBA signed June 2015. Initial capital cost estimate \$911m; mine life 14 years. On February 15, 2017: Agnico Eagle approved Meliadine and Amaruq projects for development with production beginning in 2019. The high-grade Meliadine gold project has 3.4 million ounces of gold in proven and probable reserves* (14.5 million tonnes at .32 g/t) and a large mineral resource.	Media release, 25 July 2018' Agnico Eagle reports Q2 results; production guidance, Amaruq permit, Meliadine on budget and on schedule; drilling continues to extend mineralization at multiple sites  Media release, 16 July 2018, Agnico Eagle updates Nunavut projects; water licence granted for Whale Tail, production on schedule, Amaruq exploration expands, sealift season commences at Meliadine  <b>The Meliadine project was approved for development on February 16, 2017 and is now under construction.</b>

## NWT & Nunavut Chamber of Mines – Northern Mining News

<a href="#">Back River</a>	<a href="#">Sabina Gold &amp; Silver Corp.</a>	Gold	Approximately 60KM from Hackett River; adjacent to the Wishbone Greenstone belt. Consists of George and Goose Lake deposits and holds significant gold resources. Estimated construction jobs: 1,600 Estimated mine jobs: 900 Sabina's Feasibility Study on its 100% owned Back River Gold Project presents a project designed on a fit-for purpose basis, with the potential to produce ~200,000 ounces a year for ~11 years with a rapid payback of 2.9 years (at a US\$1,150 gold price and a 0.80 exchange rate). Initial CAPEX of \$415 million. EA complete	22 October 2018, Sabina Gold & Silver expands Nuvuyak Discovery at Back River Gold Project with multiple New gold intercepts
<a href="#">Kiggavik</a>	<a href="#">AREVA Resources Canada Inc.</a>	Uranium	Proposed uranium mine 80 km W of Baker Lake. Estimated Construction jobs: 750 Estimated mine jobs: 600	25 July 2016, INAC, on behalf of responsible ministers for authorizing if Kiggavik Project should or should not proceed, accept NIRB's determination it not proceed at this time.
<a href="#">Izok Corridor Project (with High Lake &amp; Hood River deposits)</a>	<a href="#">MMG Ltd.</a>	Copper, Zinc, Gold, Silver	High Lake is 1,710-hectare, copper-zinc-silver-gold property, 190 km ESE of Kugluktuk. Izok is high-grade zinc-copper-lead-silver deposit, 255 km SW of Kugluktuk. Estimated construction jobs: 1,140 Estimated mine jobs: 710	Nunavut Government announced that the Grays Bay Port and Road project did not qualify for federal Transport Corridor funding.  Company stated publicly that project needs Grays Bay Road and Port project infrastructure to become a mine.
<a href="#">Chidliak</a>	<a href="#">De Beers</a>	Diamonds	Located 120kms NE of Iqaluit, Nunavut, and 180 km S of Pangnirtung. 74 kimberlites discovered with 8 potentially economic on 317,213-hectare site. Positive Phase One PEA, updated May 2018 highlights: <ul style="list-style-type: none"> <li>•After-tax payback of 2.2 years</li> <li>•Life of mine 13 years</li> <li>•Resource at CH-6 and CH-7 exceeds 22 million carats</li> <li>•Pre-production capital requirement ~\$455m, incl \$95m for access road from Iqaluit, \$55m in contingency</li> <li>•Pre-tax NPV(7.5) of \$1069 million and a pre-tax IRR of 38.6%</li> <li>•After-tax NPV(7.5) of \$679 million and an after-tax IRR of 31.1%</li> <li>•Average LOM strip ratio of 6.6:1 (average across the combined CH-6 and CH-7 open pits); Mining to a depth of 300 mbs at CH-6</li> </ul>	Media release, 13 September 2018 Peregrine Diamonds announces completion of plan of arrangement
<a href="#">Angilik</a>	<a href="#">ValOre Metals Corp.</a> (formerly Kivalliq Energy)	Uranium	340,268-acre property located SW of Baker Lake; Hosts the high-grade Lac 50 Trend deposit	Media release, 26 October 2018 ValOre secures bridge loan and announces intent to proceed with rights offering
<a href="#">Qilalugaq</a>	<a href="#">North Arrow Minerals</a>	Diamonds	7 km from tidewater; 9 km from Repulse Bay, Melville Peninsula; 7,143 hectares of contiguous mineral claims. Largest kimberlite in Nunavut.	Media release, 24 September 2018 North Arrow drills new kimberlite at Mel Diamond Project, Nunavut
<a href="#">Committee Bay Gold Project</a>	<a href="#">Auryn Resources</a> (purchased North Country Gold Corp.)	Gold	<ul style="list-style-type: none"> <li>• High grade gold endowment</li> <li>• Existing exploration infrastructure</li> <li>• 217,600 hectares with district scale discovery opportunities</li> </ul>	Media release, 9 July 2018, Auryn to commence drilling at Committee Bay Gold Project

Project maps

